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WHAT TEACHING DEVICES SHOULD YOU USE?

Visual and auditory teaching devices can greatly improve your teaching because the learning experience can be made more concrete.

Learning is dependent upon the reactions aroused in the learner by you the teacher.

New subject matter becomes meaningful as you relate it to direct concrete experiences.

Do you as an extension teacher use words without understanding on the part of the learner?

Empty words build empty meanings.

New words and ideas to be meaningful to your learners must have the underpinning of concrete experiences.

Is the level of understanding assumed by you in your meeting the level which the members of your group have attained?

Teaching devices range all the way from one extreme of direct experience to the other extreme of pure abstraction.

In his book "Audio-Visual Methods of Teaching"<sup>1</sup>, Dr. Edgar Dale has a diagram which he calls the "Cone of Experience". At the base of his diagram Dale puts direct experience. Upon this base he mounts one by one in the order of abstractness, the various devices and aids used in teaching. These he divides into 3 groups: those which involve doing, those which involve observing, and those which involve symbolizing. To be effective, the more abstract methods of teaching, Dale shows, must have the underpinnings of concrete experience. The good teacher ties in the words with a picture, the picture with the object, and the object with the experience or the action. Through this diagram Dale suggests to us the necessity of using many methods in order to develop full understanding on the part of those we teach.

Adapting Dr. Dale's diagram to extension teaching we see that our result demonstrations and participating methods demonstrations are basic because they teach the new recommended practices by means of direct experience. When we teach canning by having people actually can, or when we teach terracing by having people actually build terraces, we are using methods which bring best results in real understanding for most people. To supplement these direct experiences we need models or life-size "mock-ups" to handle and examine where the complexity of the thing we are teaching makes it necessary to simplify the idea involved. We can use dramatic participation, particularly in 4-H club work. In this way of teaching we get people to feel that they are experiencing what we are attempting to teach.

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1. Dale, Edgar - Audio-Visual Methods in Teaching, Chapter IV.

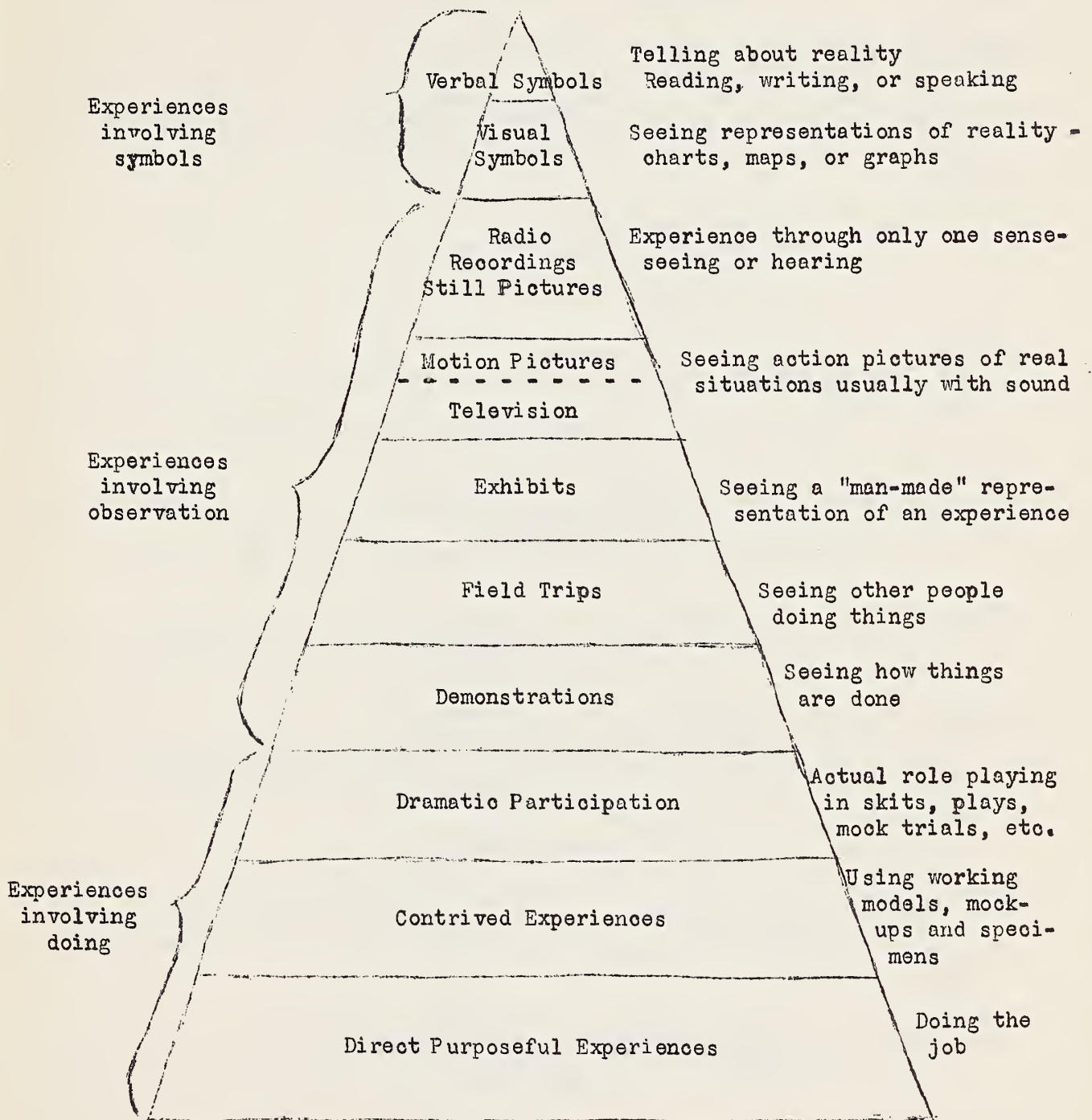


More abstract than these first three methods are those which involve observation -- tours, exhibits, motion pictures, television, radio, recordings, and still pictures. The effectiveness of the use of these methods depends, for the most part, on the extent to which we use them to supplement and enrich experience; they are not substitutes for it. Visual symbols, such as charts, graphs, maps, and words themselves, are the most abstract methods of teaching. They, too, should be used but they should be used carefully and with attention to the other experiences of the learner. If we expect the outcome of our teaching to be complete understanding and an ability to solve problems we need to use many methods to assure well-rounded experiences with the subject matter.



Edgar Dale has designed the following visual aid to explain the types of audio-visual devices and their positions in the learning process.<sup>1</sup> These devices range from the concrete or doing, to the abstract or symbolic.

"CONE OF EXPERIENCE"



1. - Dale, Edgar - Audio-Visual Methods in Teaching, Chapter IV.

## BRIEF DEFINITION OF THE TEN DIVISIONS OF THE "CONE OF LEARNING"

Direct purposeful experience - reality itself - doing the job.

Something you can "get your fingers on", "sink your teeth into" - it's real, you cook the meal, make a dress, adjust your plow, shear the sheep.

Contrived experience - simplified reality to secure understanding more easily such as a globe or planetarium.

Using working models or "mock-ups" instead of the real thing. A mock-up differs from a model in that a model is a miniature of the real thing and a mock-up shows only one or more features of the real thing in simplified detail.

Models           - Home arrangement  
                  - Farm building construction  
"Mock-ups"       - Home lighting  
                  - Water system

Dramatic participation - role playing

The re-enactment of the real thing. It is more helpful to participate than look on.

Skits, plays on social courtesy, parliamentary procedure, mock trials.

Demonstrations - seeing someone do the job

Teach by watching someone else do the real thing. They are more helpful if they include both showing and doing.

They are most helpful if they include telling, showing, and doing.

Field trips - seeing results

A planned trip to see what someone else has done or is doing.

Visit a remodelled kitchen, grain test plot, see a terrace built.

Exhibit - graphic representation of performance

A group of materials planned to show something but on a more artificial basis than field trips and demonstrations. They are most effective if they include motion and appeal to other senses - touch, taste, smell, etc. Exhibits are to be seen, not read.

A display of 4-H winnings, hybrid seed corn.

Motion pictures and television - pictures of someone doing the job

Effective because they can show a long period of time (a life cycle) and can compress space - see any and all areas of the world. Colored sound motion pictures are best.

Still pictures, radio, recordings, film strips, and slides

All one dimensional devices (appeal to only one sense)

Need to be related to other experiences and concepts to be meaningful.

Visual symbols - seeing

Include charts, maps, graphs, etc. Should be ample in size, geared to the level of the people and include only one central idea.

Verbal symbols - telling

Include reading, writing, and speaking. Their meaning depends on experience.





